Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image digitizing system comprising:

a spatial array of sensors for converting a visual image to signals, each of said sensors providing a respective signal during an imaging operation; and

a signal converter for converting said signals into pixel data describing an array of pixels, each of said pixels being associated with a respective one of said sensors during the imaging operation, the pixel data associated with at least one ~~most~~ of said pixels being a function of signals provided by the respective sensors during the imaging operation, ~~the pixel data associated with~~ and at least one of said pixels during the imaging operation having [[,]] ~~wherein for the at least one of said pixels~~ an associated offset value ~~equals~~ and an associated gain value purposefully set to a highest value for a number of bits supported by the system such that the pixel data associated therewith ~~during the imaging operation,~~ is not ~~being~~ a function of a signal from the respective sensor during the imaging operation but ~~being~~ a function of one or more signals from neighboring sensors during the imaging operation.

2. (Currently Amended) An image digitizing system as recited in Claim 1 wherein multiple pixels are associated with each sensor so that:

for at least one ~~most sensors~~ sensor, all pixels associated with that sensor have values that are functions of the signal provided by that sensor; and

for said least one sensor, all pixels associated therewith have values that are not functions of the signals provided by that sensor but are functions of signals provided by said neighboring sensors.

3. (Currently Amended) An image digitizing system as recited in Claim 2 wherein said signal converter comprises:

an analog-to-digital converter for converting said signals to signal data;

a data processor for converting said signal data to said pixel data; and

memory for storing sensor calibration values that said data processor uses in converting said signal data to said pixel data, said sensor calibration values being selected from a set of possible calibration values, for at least one ~~most~~ of said possible calibration values determining the function accordingly to which a pixel value is determined from the signal data from the signal from the associated sensor, a first of said possible calibration values indicating that the pixel value for the corresponding pixel is not to be a function of signal data from the associated sensor but a function of the signal data from a neighboring sensor.

4. (Original) An image digitizing system as recited in Claim 3 wherein said sensor calibration values are two dimensional, with an offset-function value corresponding to an offset function and a scaling-function value corresponding to a scaling function, said possible calibration values defining an extreme scaling-function value and an extreme offset-function value, said first possible calibration value specifying said extreme offset-function value and said extreme scaling-function value.

5. (Currently Amended) An image digitizing method comprising:

calibrating an array of sensors so as to distinguish "good" and "bad" sensors during an imaging operation;

using said array of sensors to convert a visual image to signals during the imaging operation; and

converting said signals to image data including pixel values associated with an array of pixels during the imaging operation, each pixel corresponding to a respective one of said sensors during the imaging operation, pixel values associated with a good sensor being a function of the signal provided by that good sensor

during the imaging operation, and pixel values associated with a bad sensor during the imaging operation having [[,]] ~~for which~~ an associated offset value ~~equals~~ and an associated gain value purposefully set to a highest value for a number of bits supported by the system such that the pixel data associated with the bad sensor ~~during the imaging operation,~~ is not ~~being~~ a function of the signal provided by that bad sensor during the imaging operation but is ~~being~~ a function of at least one signal provided by a neighboring good sensor during the imaging operation.

6. (Original) A method as recited in Claim 5 wherein said image data describes a series of raster lines, each of said raster lines including a series of said pixels, all pixels associated with said bad sensor having values determined not as a function of a signal provided by said bad pixel but as a function of said neighboring good sensor.

7. (Previously Presented) A method as recited in Claim 6 wherein said converting step involves:

converting said signals into digital signal data; and

converting said digital signal data into said image data using sensor calibration values associated with respective ones of said sensors, said sensor calibration values being selected from a range of possible calibration values, said bad sensor being associated with a possible sensor calibration value that indicates that the corresponding pixel data is determined not as a function of its signal but as a function of the signal of a neighboring sensor.

8. (Original) An image digitizing method as recited in Claim 7 wherein said sensor calibration values are two dimensional, with an offset-function value corresponding to an offset function and a scaling-function value corresponding to a scaling function, said possible calibration values defining a maximal scaling-function value and a maximum offset-function value, the sensor calibration value for

said bad sensor specifying said maximum offset-function value and said maximum scaling-function value.

9. (Currently Amended) An image-digitization method comprising the steps of:

using an array of sensors to generate a series of signals during an imaging operation; and

converting said signals into pixel data describing an array of pixels during the imaging operation, each of said pixels being associated with a respective one of said sensors, the pixel data associated with at least one ~~most~~ of said pixels being a function of signals provided by the respective sensors during the imaging operation, ~~the pixel data associated with~~ and at least one of said pixels during the imaging operation[[,]] having ~~wherein for the at least one of said pixels~~ an associated offset value ~~equals~~ and an associated gain value purposefully set to a highest value for a number of bits supported by the system such that the pixel data associated therewith ~~during the imaging operation,~~ is not ~~being~~ a function of a signal from the respective sensor during the imaging operation but ~~being~~ a function of a signal from a neighboring sensor during the imaging operation.

10. (Original) A method as recited in Claim 9 wherein plural pixels are associated with each of said sensors so that for said at least one of said sensors none of the pixels associated therewith are described by pixel data that is a function of a signal associated with that sensor.

11. (Previously Presented) A method as recited in Claim 10 wherein said converting step involves:

converting said signals into digital signal data; and

converting said digital signal data into said pixel data using sensor calibration values associated with respective ones of said sensors, said sensor calibration values being selected from a range of possible calibration values, at least one of said possible calibration values indicating a sensor for which the

corresponding pixel data is determined not as a function of its signal but as a function of the signal of said neighboring sensor.

12. (Original) An image digitizing method as recited in Claim 11 wherein said sensor calibration values are two dimensional, with an offset-function value corresponding to an offset function and a scaling-function value corresponding to a scaling function, said possible calibration values defining a maximal scaling-function value and a maximum offset-function value, said first possible calibration value specifying said maximum offset-function value and said maximum scaling-function value.